



UNITED STATES DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration  
NATIONAL MARINE FISHERIES SERVICE  
Silver Spring, MD 20910

February 28, 2006

RULES PROCESSING TEAM

FEB 28 2006

Minerals Management Service  
Attn: Rules Processing Team  
381 Elden Street, MS-4024  
Herndon, Virginia 20170-4817

Dear Mr. Cruickshank:

The National Ocean and Atmospheric Administration (NOAA) has reviewed the Minerals Management Service's (MMS) *Advance Notice of Proposed Rulemaking (ANPR) on Alternate Energy-Related Uses on the Outer Continental Shelf (OCS)* and appreciates the opportunity to comment on the development of this program. Over the past several years, there has been growing interest in the development and utilization of marine resources in the U.S. Exclusive Economic Zone (EEZ) for nontraditional forms of energy development, such as the establishment of liquefied natural gas (LNG) terminals, extraction of methane hydrates, and production of renewable energy sources, including offshore wind power, tidal energy, and ocean thermal conversion. The level of discussions and number of proposals for energy production in federal offshore waters is growing as interest in offshore aquaculture development and other non-energy related uses increases.

As the activity of multiple user groups increases in the marine setting, NOAA believes the agencies charged with managing resources and uses on the OCS should work together to develop a more comprehensive and coordinated ocean management framework that will allow for improved decision making in the best interest of the American public. NOAA has provided specific comments to MMS on the development of alternate energy-related uses on the OCS while noting that a dialogue between NOAA and MMS to address larger ocean management issues would benefit this new program as well as future management efforts.

NOAA views these comments as the beginning of many future discussions regarding the development of alternate uses on the OCS, as well as broader ocean management issues. Please note NOAA's points of contact for coordinating with MMS on the ANPR. Thank you for the opportunity to provide comments. NOAA looks forward to working with MMS on these activities.

Sincerely,

James W. Balsiger, Ph.D.  
Acting Deputy Assistant Administrator  
Regulatory Programs

Enclosure



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**NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA)  
COMMENTS ON  
DEPARTMENT OF THE INTERIOR'S MINERALS MANAGEMENT SERVICE  
(MMS) ADVANCED NOTICE OF PROPOSED RULEMAKING (ANPR)  
30 C.F.R. PART 285, RIN 1010-AD30, DECEMBER 30, 2005**

**ALTERNATE ENERGY-RELATED USES ON  
THE OUTER CONTINENTAL SHELF (OCS)**

February 28, 2006

The National Oceanic and Atmospheric Administration (NOAA) appreciates the opportunity to provide comments on the Department of the Interior, Minerals Management Service's (MMS) Advance Notice of Proposed Rulemaking (ANPR) on the Alternate Energy-Related Uses of the Outer Continental Shelf. MMS is seeking comments on the development of a regulatory program to implement portions of the Energy Policy Act of 2005, Section 388 regarding energy development from sources other than oil and gas on the OCS (i.e., renewable energy such as wind, wave, solar, and current and nonrenewable alternative energy). MMS is also seeking comments regarding alternate uses of existing facilities such as, but not limited to offshore aquaculture, research, education, recreation, support for offshore operations, and telecommunications facilities. The following comments reflect input from the full range of our ocean programs and statutory authorities.

Many NOAA mandates have legitimate and *potentially* overlapping statutory jurisdiction with the proposed activities described in this ANPR, depending on the nature and location of the activity. These include, but are not limited to: the Endangered Species Act 16 U.S.C 1531 et seq., the Magnuson-Stevens Fishery Conservation and Management Act 16 U.S.C. 1801 et seq., Coastal Zone Management Act 16 U.S.C 1451 et seq., Marine Mammal Protection Act 16 U.S.C 1361 et seq., National Marine Sanctuaries Act 16 U.S.C 1431 et seq., Marine Protection Research and Sanctuaries Act 16 USC 1431-1445a, Atlantic Tunas Convention Act 16 U.S.C. 971 et seq., Eastern Pacific Tuna Fishing Act 16 U.S.C 972, Atlantic Striped Bass Conservation Act 16 U.S.C 1851, Salmon and Steelhead Conservation and Enhancement Act 16 U.S.C 3301 et seq., North Atlantic Salmon Fishing Act 16 U.S.C 3601 et seq., National Environmental Policy Act 42 U.S.C. 4321 et seq., Federal Water Pollution Control Act (Clean Water Act) 33 U.S.C. 1251 et seq., and Rivers and Harbors Act 33 U.S.C. 401.

NOAA supports efforts for the development and implementation of a program to manage alternate energy-related uses on the OCS. NOAA believes this is a timely opportunity to work with MMS to address ocean management in the OCS in a comprehensive and coordinated manner for the benefit of resource use and conservation in the marine environment. NOAA believes MMS should view its mandate to regulate alternate uses in the OCS in an ecosystem context and proceed in a precautionary manner in order to evaluate the implementation of new and emerging technologies in the marine setting. Early consultation with NOAA and other agencies will benefit all parties involved by

minimizing costs, time expenditures, and impacts to marine resources. Finally, NOAA sees value in providing alternate uses of existing OCS structures for new activities, such as aquaculture, provided MMS considers these uses in a larger ecosystem context.

Based on the potential for shared interests, NOAA is willing to work collaboratively with MMS to provide background information, develop creative solutions, simplify processes, and resolve any potential differences. From that perspective, these comments should be considered as a beginning of interagency discussions rather than the end.

## **GENERAL COMMENTS**

NOAA believes that the federal agencies, in coordination with the coastal states and other stakeholders, should develop a more comprehensive ocean management regime. MMS' 5-Year Program, combined with this rulemaking under the Act, presents a timely opportunity to begin this process. By doing so, there could be greater predictability in determining appropriate and available locations for various OCS activities. Such upfront ocean planning could also help resolve user conflicts and could provide greater assurance for locating various types of energy-related projects; this approach mirrors our charge in the Ocean Action Plan.

NOAA has extensive resources to contribute to a collaborative ocean management regime. For example, NOAA's National Marine Sanctuaries Program, Marine Protected Areas Program, Protected Resources Program and Fisheries Habitat Program can contribute information on specific resources of distinct areas of the oceans. NOAA's Coastal Management Program can provide a direct link to the State coastal management programs and Coastal Zone Management Act (CZMA)-related issues. NOAA's Coastal Services Center can provide information related to coastal observing systems, remote sensing and other technological services. NOAA's Ocean Exploration, National Undersea Research Program, and NOAA's Pacific Marine Environment Laboratory's undersea vents programs may be able to contribute information about the "geographical, geological and ecological characteristics" (and archaeological information) as well as "environmental sensitivity and marine productivity" of regions of the OCS. The NOAA/University of New Hampshire partnership with the Center for Coastal and Ocean Mapping and Joint Hydrographic Center develop innovative and sophisticated, 3-D mapping and visualization tools to interactively explore and analyze many forms of data and data processing techniques relevant to determining possible uses of the OCS. NOAA's Coastal Management, National Estuarine Research Reserve and Sea Grant programs should also be able to contribute information regarding coastal communities and economies.

Building on the work of the Subcommittee on Alternative Energy/Use of the OCS Policy Committee, MMS, in collaboration with NOAA and other pertinent federal agencies, should establish a method for consistent decision making through the identification of pertinent federal statutes, and development of criteria and a process for evaluating alternatives based on the multiple statutory goals, objectives, and standards. Effective criteria for evaluating proposed offshore uses include ensuring sustainability of resources;

conserving biodiversity; and maintaining economic, social, and cultural access to resources. These criteria can be most effectively incorporated through an ecosystem approach to management (EAM). EAM is management that is adaptive, geographically specified, takes account of ecosystem knowledge and uncertainties, considers multiple external influences, and strives to balance diverse social objectives. Adopting an ecosystem approach would put alternate energy use policy decisions in a broader context. EAM is a major element of NOAA's strategic plan and many resources within the agency are available for consultation by and collaboration with MMS. As resources allow, NOAA encourages MMS to use this rulemaking to begin this dialogue.

The Alternate Energy-Related Uses on the OCS is a new program within MMS, managing the implementation of relatively new and emerging technologies while considering creative uses of existing facilities. The depth of information regarding impacts on living marine resources may vary by technology and location. Consequently, NOAA recommends MMS implement the Program in a phased and precautionary manner (see Appendix 1) to enable agencies to develop efficient procedures that will avoid or minimize impacts on living marine resources.

## **SPECIFIC COMMENTS**

NOAA's specific comments are offered in order based on the five program areas listed in MMS's ANPR. Note that we do not offer comments on each question or topic listed in the ANPR.

### **Access to OCS Lands and Resources**

#### **E. Identify geographical areas of interest**

At present, MMS is working on developing an integrated information system, referred to as the Multipurpose Marine Cadastre (MMC), to provide spatial data on designations, uses, restrictions, and responsibilities in the marine environment, in fulfillment of its requirements under the Energy Policy Act. NOAA has submitted comments on development of the MMC and looks forward to working with MMS and other federal partners in developing this information system. The MMC in development should provide essential information that is needed to examine and evaluate proposed offshore activities (under authority of Section 388 of the Energy Policy Act). However, it is critical that MMS: include all pertinent information in its integrated information system; provide opportunities whereby information can be updated, added, and amended as necessary on a timely basis; and allow access to this information, as appropriate by other local, state, and federal agencies, potential applicants, and the public. This includes metadata on social and economic use and non-use values associated with the geographic areas delineated in the database.

NOAA has detailed time series of marine data that may be helpful as MMS or industry sectors evaluate the effects of proposals on marine resources and their habitat. Our data

and GIS products could help identify areas to avoid for economic, ecological, or cultural reasons.

#### G. Process permits and applications

NOAA recommends a process that integrates agency input at the earliest possible stage of analysis when our technical review staff is given opportunities to review preliminary plans in the permit process. Specifically, NOAA recommends a process that includes formal review at the preliminary design, feasibility design, and final design stages of development. The review process should evaluate a project in an ecosystem context and consider sustainability of resources, conservation of biodiversity, and maintenance of economic, social, and cultural access to resources.

#### H. Process pre-application resource assessments

NOAA recommends that MMS make scoping of environmental, ecosystem, and resource issues and compliance a condition of the pre-application process. This is similar to Federal Energy Regulatory Commission's (FERC) actions under the Federal Power Act, where stakeholders are notified of an applicant's intent to pursue feasibility studies. Early notification allows resource agencies to disclose regulatory and permit conditions to applicants at the earliest possible stage of development. Since the OCS already supports multiple uses, pre-application discussions should reduce conflicts that consume valuable time and effort.

*3. In cases where applicants or interested parties propose activities that would foreclose competing future uses, how should MMS estimate "a fair return," especially if the competing uses would likely be public uses?*

In calculating the value of various proposed offshore activities, non-market valuation techniques should be included to provide an estimate for the value of restricting or prohibiting uses in particular areas of the exclusive economic zone (EEZ). Calculation and examination of these values should be used to determine the costs to society of permitting a particular activity (at the loss of another potential activity or set of benefits that would be provided if uses were restricted or prohibited in a particular area). These costs should be recovered from permit applicants through fees, royalties on use, and/or a combination of both. In addition to seeking to recoup its administrative, operating, monitoring, and enforcement costs, MMS should collect resource rent, at a sufficient rate to compensate society for the costs of opportunities foregone by permitting a particular activity that uses or impacts a public trust resource.

*4. What constitutes a geographical area of interest?*

From a marine resource point of view, an expansive reading of the term should be employed. The geographical area of interest must reflect:

- Migrations of marine species into, through, or near the project area
- Impact to species or their habitat associated with altered tides, currents, water chemistry, or other natural phenomena

- Impacts resulting from construction, operations, and transportation associated with the project
- An understanding of both local and regional ecosystem functions and inter-relationships
- Effects of energy-related OCS activities on the sport and commercial fishing industry, protected species, marine protected areas, and cultural resources
- Consideration of necessary onshore support facilities.

*5. What assessments should we complete prior to competition?*

As mentioned above, NOAA encourages MMS to consult with us early in regional planning efforts or in developing specific projects. NOAA recommends MMS use the NEPA process as a guide for early and continued coordination. In addition, assessments should be broad in scope, and include an evaluation of the direct, indirect, and cumulative impacts of activities on living marine resources, habitat and physical features, other environmental features (such as water quality), cultural resources and current uses (and non-uses).

*7. Should MMS take a broad approach to developing a program, or should efforts be targeted to specific regions?*

Development of this program should be done on a national scale, with the establishment of nationally consistent regulatory requirements, criteria, and processes. Although activities and designations in the EEZ will have localized and regional impacts, significant national concerns and interests will also be implicated. While development of a regulatory program can be tailored to meet local and regional needs and concerns, MMS' regulatory program should provide an overarching set of national requirements that will be applied on a regional basis. A broadly defined program should recognize, however, that there will exist variations in types of living marine resources and sensitivity to impacts. Natural resource concerns must be addressed at all sites, and measures to eliminate, minimize, and/or mitigate for resource impacts must be identified to the satisfaction of the agencies exercising statutory authorities. Conflicts with and opportunities for other OCS industries should be analyzed from a similar perspective.

*8. How should MMS consider other existing uses when identifying areas for access?*

Existing uses should be afforded deference when considering new areas for access. MMS should look for opportunities based on compatibility of multiple uses, ability to minimize conflicts among existing and new uses, or ability to adequately mitigate for impacts on existing uses by new projects. MMS should also defer to existing marine resources in areas where ecological values have preempted other OCS development. Other potential uses of existing facilities or OCS areas should be evaluated when considering energy-related projects.

*9. How should MMS balance existing uses within an area with potential wind and current energy projects?*

NEPA and the Federal Power Act provide mechanisms for balancing complex natural resource and socioeconomic interests. MMS should employ these methods, and where

appropriate, develop similar methods targeted for particular situations. A key component of such coordination is a full and open dialogue beginning as early as possible.

*11. What criteria (e.g. - environmental considerations, energy needs, economic) should MMS consider in deciding whether or not to approve a project? What criteria should MMS consider for different competing projects (i.e. - wind versus current) for the same site?*

Criteria for evaluating proposed offshore uses should include an examination of the impacts a proposed offshore use would have on living marine resources, habitat, and ecosystem functions and benefits. Three strategic goals for every managed area should be to:

- Ensure sustainability of resources
- Conserve biodiversity
- Maintain economic, social, and cultural access to resources

Other criteria include measuring the complete suite of societal benefits and costs, including ecosystem goods and services in four categories:

- Provisioning services (e.g., products obtained from the ecosystem such as food, water, minerals);
- Regulating services (benefits derived from regulation of ecosystem processes such as climate regulation, disease regulation);
- Cultural services (nonmaterial or non-market benefits obtained from ecosystems, such as recreation and ecotourism, aesthetic, cultural heritage); and
- Supporting services (services necessary for the production of all other services, such as nutrient cycling, primary production).

Impacts from any given project may be minor or substantial depending on the nature of the activity and its location. Impacts may be direct, indirect, and cumulative to species and their habitats. MMS's knowledge of all these considerations will assist your agency in making sound permitting decisions.

### **Environmental Information, Management, and Compliance**

NOAA encourages MMS to use the best available science when evaluating a lease sale or project. The level of information used in decision making should be commensurate with the complexity and magnitude of the potential adverse effects of a project. Impacts that are more than minimal and have a lasting duration are of concern to NOAA. NOAA believes that MMS should consider impacts to all state and federal marine protected areas. While MMS may not authorize an alternate energy-related use within a designated protected area or habitat type, the regulations should also consider foreseeable collateral or boundary impacts to these resources resulting from energy development from sources other than oil and gas on the OCS.

NOAA encourages MMS to implement a monitoring program for both project development and ongoing operations as impacts to living marine resources can occur in both stages. The project applicant should retain the burden of proof and hold

responsibility for monitoring project impacts. An enforcement program should ensure the project applicant complies with permit terms and conditions.

K. Information requirements needed for environmental management systems for any project

As mentioned above, NOAA holds a large inventory of site-specific marine data that could be helpful to MMS for evaluating program- or project-level designs. NOAA also recommends MMS conduct, at a minimum, an environmental assessment that considers direct, indirect, and cumulative impacts on individual species and their habitats, as well as an ecosystem-level analysis of potential impacts and effects on or opportunities for other OCS uses. MMS should evaluate alternative measures for avoidance, reduction, minimization, or mitigation.

M. Examples of best practices for environmental compliance, monitoring and effectiveness being used in the U.S. and elsewhere.

NOAA is developing a draft "best practices" document for LNG applications, which is expected to be made available for public comment in the near future. Similar efforts of compliance and monitoring include cooperative efforts on wind and hydrokinetics, criteria for marine acoustics, vessel approach measures for marine mammals, and Essential Fish Habitat guidance. Through the Acoustical Society of America, criteria are being developed for management practices for activities that generate marine noise and impacts on fish, sea turtles, and marine mammals.

As for regulatory regimes MMS might want to consider as it proceeds with this rulemaking, there are several potential Interior models. Obviously, the current OCSLA regulatory structure is the most comprehensive resource management program for the OCS. In addition, the Federal Land Policy and Management Act authorizing the Bureau of Land Management's (BLM) Wind Energy Development Program on public lands may be useful. BLM's Wind Energy Development Program for onshore public lands, including its associated programmatic environmental impact statement, might be a particularly relevant model, because it has been relatively well received by most stakeholders, and because MMS may take a broad and potentially tiered (by specific region) approach to begin developing the new regulatory regime for alternate energy-related uses of the OCS.

N. Balancing environmental considerations with national energy needs.

The balancing mechanisms inherent in the National Environmental Policy Act and the Federal Power Act are good models for weighing costs and benefits of an action. MMS should develop procedures for establishing priorities, conferring with stakeholders, comparing methodologies, and arbitrating stakeholder differences.

*12. What types and levels of environmental information should MMS require for a project?*

Natural resource assessments already required under the Endangered Species Act, NEPA, and other laws for programs and projects should contain sufficiently detailed and comprehensive information, commensurate with the size, scope, and anticipated impacts or stakeholder conflicts. The scoping process set forth in NEPA establishes project-level thresholds for information needs and analysis. MMS should rely on NEPA, or a NEPA-like format, to determine tiers of information requirements. Upfront discussions will ensure that all issues and resources are included in environmental analyses, and that key data gaps are addressed through cooperative efforts that will move MMS toward decisions that respect all concerns.

*13. What types of site specific studies should MMS require? When should these studies be conducted?*

Based on a preliminary assessment and pre-consultation communications with resource agencies, the timing and nature of site-specific studies can be determined. Some studies, or perhaps literature reviews, may apply to more than one project or project type. Open discussions early could add efficiencies across energy sectors. By definition, site-specific studies require a project description and some level of understanding of the unique set of environmental, ecosystem, and natural resource values under examination. These studies should commence at the point where a conceptual design is deemed acceptable to MMS, after pre-consultation with resource agencies. Studies should be carried out in parallel with feasibility-level engineering design. MMS should establish review, evaluation, and consultation time frames that offer reasonable opportunities for review by resource agencies. In addition, MMS should require site-specific bottom habitat surveys of all sensitive offshore areas under consideration for development prior to providing access rights to OCS lands. Depending on location, similar studies may be needed for the water column or surface waters. NOAA recommends that MMS identify studies, establish methods, conduct research, and analyze data in an open and collegial manner that encourages consensus.

*14. What should be the goals and objectives of monitoring, mitigation, and enforcement?*

Once an activity is permitted, monitoring is critical for evaluating impacts. NOAA recommends the establishment and approval of monitoring plans as a permit requirement for applicants and the costs borne by the permit holder. All monitoring plans must be of sufficient frequency, scope, and scientific integrity to satisfy federal data quality, peer review, and conflict of interest requirements. Their intended use would include evaluation of short-term impacts on resources and uses and to provide information for the development of long-term impact assessments.

Considering all respective resources under various statutory authorities and lawful jurisdictions, MMS should establish a mitigation goal to offset project impacts that cannot be satisfactorily reduced or eliminated. Mitigation formulas are evolving and highly influenced by numerous factors including but not limited to: nature and extent of impacts; regional customs or norms; availability of suitable mitigation alternatives; cost

and benefits produced by mitigation; level of environmental sensitivity; and ecosystem resilience altered by the activity.

An enforcement goal should seek to ensure effective compliance with all relevant laws of the United States including all federal, state, and local jurisdictions.

*15. What types of impacts are of concern? What are effective approaches for mitigating impacts? How can mitigation effectiveness and compliance with federal environmental statutes be assessed?*

Impacts of Concern:

- Any impact which reduces the quality and/or quantity of living marine resources. These impacts may include direct or indirect physical, chemical, or biological alterations of the waters or substrate and loss of, or injury to, benthic organisms, prey species and their habitat, and other ecosystem components. Adverse effects to living marine resources may result from actions occurring within or outside of the resource and may include site-specific or area-wide impacts, including individual, cumulative, or synergistic consequences of actions.
- Section 388 of the Energy Policy Act does not apply to any area on the OCS within the exterior boundaries of any unit of the National Park System, National Wildlife Refuge System, or National Marine Sanctuary System, or any National Monument. NOAA believes that MMS should consider impacts to all state and federal marine protected areas. While MMS may not authorize an alternate energy-related use within a National Marine Sanctuary (Sanctuary), the regulations should also consider foreseeable collateral or boundary impacts to a Sanctuary resulting from energy development from sources other than oil and gas on the OCS.
- Devices that use the energy of the wind, waves, tides, or ocean thermal gradients may create unintended impacts to living marine resources. Disturbance to the seabed and benthic communities, noise, entanglement potential for marine mammals and sea turtles, and aesthetics are all examples of impacts that MMS should consider.
- Activities associated with an alternate energy-related use of the OCS, e.g., construction-related or site survey activities, can produce sound that potentially causes lethal or stress-related impacts to marine mammals and fish.
- Activities that cause physical injury or mortality to marine mammals, amphibians, fish, invertebrates, and plant species
- Alteration of physical or chemical makeup of the local or regional environment which degrades habitats or diminishes biological productivity in a significant manner
- Projects that have the potential to affect nutrient exchange, sediment movement, primary productivity, and species movement and migration
- Loss of resource access by established user groups

Mitigation Approaches:

- Reduce the scope, duration, and/or intensity of activity
- Relocate activity to a less sensitive area
- Restrict operations to avoid or minimize impacts
- Modify or redesign project to reduce anticipated impacts
- Identify suitable off-site habitat restoration of sufficient kind and extent

- Establish effective monitoring, reporting, and compliance mechanisms
- Back up mitigation measures with enforcement capability
- Set up standard review procedures with measurable and specific requirements and expectations for compliance and enforcement
- Have ability to revoke permits/licenses and shutdown operations where permit conditions are not in compliance

*16. What regulatory program elements lead to effective enforcement of environmental requirements?*

This is highly dependent on the specific statutory authorization governing any given set of environmental compliance issues. For NOAA, see the list of statutory mandates earlier in this memo. Regulatory program elements where compliance and enforcement terms are clearly spelled out in advance are most likely to lead to effective program administration over time.

*17. How should environmental management systems be monitored (by applicant, MMS, or an independent third party)? What should be the MMS roles versus the roles of industry for ensuring appropriate oversight and governance?*

The industry should bear ultimate responsibility for compliance with all laws, statutes, and regulatory authorities, and MMS should ensure that all applicable consultations are carried out and permits obtained. However, government oversight is needed to ensure compliance and enforcement is effectively administered. MMS should construct a system whereby environmental management can be adapted to projects on a case-by-case basis, using judgment about all the factors surrounding a particular project as a guide to establishing appropriate governance mechanisms. For some projects, little or no oversight may be required, while other projects may require close government (or third-party) scrutiny. It is usually best for all parties to participate in discussions about monitoring protocols, roles, costs, etc. so results are accepted and applied with minimal dispute.

## **Operational Activities**

### **O. Permitting pilot projects**

As stated above, the Alternate Energy Program will manage the implementation of various new or emerging technologies with limited implementation in the marine environment. Given these circumstances, we have incomplete knowledge of the technologies' full impacts on living marine resources. Consequently, NOAA encourages MMS to proceed in a precautionary manner (see Appendix 1) by using pilot projects to implement these new technologies under the variable conditions of disparate locations.

### **Q. Protecting environmental resources during construction, production, and removal**

Please see comments regarding potential impacts of concern stated above. NOAA encourages MMS to consult with NOAA early in the process to determine methods for

avoiding, minimizing, and/or mitigating potential impacts to living marine resources during construction, production, and removal.

NOAA requests that the regulations recognize potential impacts to marine mammals from noise associated with an alternate energy-related use of the OCS, e.g., construction-related or site survey activities. NOAA requests that MMS consult with NOAA, particularly the National Marine Sanctuary Program and National Marine Fisheries Service's (NMFS) Protected Resources Program, prior to an applicant conducting noise-related activities related to an alternate energy-related use. These consultations are important to minimize or eliminate any adverse impacts on Sanctuary or marine mammal resources or qualities when activities are near the boundaries of any Sanctuary or near marine mammals.

MMS should analyze decisions for the removal of existing OCS structures on a case-by-case basis. Ecological impacts on species and their habitat from removals will depend on the degree of removal (complete, partial, topple), removal method used, and associations of marine communities to the structure. Specifically, removals involving explosives have caused harm and fatalities to fish, marine mammals, and sea turtles through concussions and damage to auditory systems.

#### Use and Removal of Existing OCS Facilities

##### Aquaculture

NOAA sees the potential utility of using offshore oil and gas platforms as operational bases for offshore aquaculture projects. NOAA views the approach described in the ANPR for alternate uses of OCS facilities as complementary to our work with respect to offshore aquaculture.

NOAA has worked closely with the Department of the Interior and MMS on language included in the Administration's National Offshore Aquaculture Act of 2005, which would authorize the Department of Commerce to establish a permitting system for offshore aquaculture. The Administration's bill is being considered in the current Congress as S. 1195.

Through NOAA's work to develop regulatory guidelines for the aquaculture program, NOAA has compiled detailed information and research that could be beneficial to MMS in developing its regulatory process. NOAA encourages MMS to explore opportunities for interagency cooperation and data sharing that can save resources and prevent duplication of efforts.

##### Rigs to Reefs

NOAA believes there may be significant value in allowing decommissioned oil and gas platforms to remain in coastal waters or the EEZ for use as artificial reefs. NOAA notes that the Gulf of Mexico and California currently possess a significant number of oil and gas platforms. While there is a well-established rigs to reefs program in the Gulf of Mexico that provides important benefits to marine species, NOAA recognizes that

platforms located in federal and state waters off of California may prove similarly beneficial. For example, the evidence suggests that these structures may provide important habitat to a number of overfished species managed under the Magnuson-Stevens Fishery Conservation and Management Act, and may also provide important habitat for other juvenile fish, invertebrates and marine life in and around the platforms. NOAA encourages MMS to consider, on a case-by-case basis whether these platforms could be converted into artificial reefs, and is willing to work with MMS, other federal and state agencies and interested stakeholders to pursue an alternative regulatory framework to support this endeavor.

#### Financial Responsibilities of Alternate Use Permit Holders

NOAA is concerned about the costs associated with platform use, maintenance, and decommissioning for new offshore industries and seeks clarification from MMS regarding financial responsibilities for alternate use permit holders. NOAA notes that new offshore industries have less access to capital than the oil and gas industry. MMS should consider this issue when developing guidelines for technology and safety requirements, contingency planning, and "pre-qualification measures."

#### Costs of Decommissioning OCS Structures

NOAA recommends MMS develop a decommissioning account for OCS structures that would build during the lifetime of a project, and would be held in escrow until the end of the project's expected life. The Nuclear Regulatory Commission uses a similar mechanism. Such an account should be based on reasonable estimates of lifespan and projected costs of decommissioning and would preclude a situation in which a company goes bankrupt, leaving decommissioning activities a burden on taxpayers.

#### Payments and Revenues

Management costs should be recovered from permit applicants through fees, royalties on use, and/or a combination of both. In addition to seeking to recoup its administrative, operating, monitoring, and enforcement costs, MMS should collect resource rent, at a sufficient rate to compensate society for the costs of opportunities foregone by permitting a particular activity that uses or impacts a public trust resource.

#### Coordination and Consultation

NOAA recommends that MMS consider adopting ecosystem-based approaches to management, as appropriate. Such measures could include innovative ways of coordinating with other local, state and federal agencies. For example, in the Southeast Region such regionally-focused coordination might be effected through organizations such as the Southeast Aquatic Resources Partnership and the Gulf of Mexico Alliance. Other regionally-based organizations, including the Gulf, South Atlantic and Caribbean Fishery Management Councils, as well as the Gulf States and Atlantic States Marine Fisheries Commissions, should be actively sought out by MMS as partners in developing environmental management systems that complement ongoing ecosystem-based approaches.

NOAA encourages MMS to develop a predictable and transparent process for the Alternate Energy Program such as the one used for the OCS Oil and Gas Leasing Program. To facilitate the consultation requirements of NOAA's statutory authorities, NOAA welcomes an open dialogue with MMS to determine options for integrating environmental and resource review processes for Alternate Energy Program activities. As stated above, this dialogue could also effectively address the larger issues of implementing a comprehensive and coordinated ocean management regime.

The nature of living marine resources and potential impacts to them may vary from region to region. NOAA encourages MMS to work closely with our regional offices to determine an effective process for evaluating projects under our statutory authorities. In addition, regional Fishery Management Councils oversee the management of fishery resources within the exclusive economic zone. NOAA encourages MMS to involve the Councils in its process as activities conducted in the OCS region can have impacts on the integrity of fish habitat and thus healthy fishery resources. Council websites are listed at: <http://www.nmfs.noaa.gov/councils.htm>.

#### **NOAA POINT OF CONTACT FOR COORDINATING WITH MMS ON THE ALTERNATE-ENERGY RELATED USES ON THE OCS ANPR**

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## **APPENDIX 1**

### **PRECAUTIONARY PRINCIPLES OF OCEAN POLICY**

Marine ecosystems will almost always be more complicated than can be fully understood. The limitations of scientific knowledge will make it impossible to predict with absolute certainty the future state of any ecosystem or to understand the forces that created an observed state. Given this uncertainty, policy decisions on alternate energy uses in the OCS should adopt a precautionary approach that limits risk that policy choices will not achieve desired goals and objectives, or that policy choices will foreclose or irreparably preclude future actions if current policy outcomes are uncertain. Criteria used internationally in adopting a precautionary approach to ocean policy include:

- If the potential impact of an action is uncertain, priority should be given to maintaining ecosystem health and productivity.
- Incomplete information on possible impacts should not be used as a reason for postponing precautionary measures intended to reduce or avoid unacceptable levels of change or to prevent serious or irreversible environmental degradation of the oceans.
- In the application of the precautionary approach, public and private decisions should be guided by:
  - Careful evaluation to ensure that changes arising from a use or uses remain within limits considered acceptable, to avoid, wherever practicable, serious or irreversible damage to the environment; and
  - Assessment of the risk-weighted consequences of various options.
- If there is a risk of serious and irreversible environmental damage resulting from an ocean use, that use should be permitted only if the damage can be mitigated, or it is limited in its extent, and there is an overriding net community benefit from the use:
  - The higher the risk of unacceptable levels of change or of serious or irreversible environmental damage, the more conservative should be the measures required to reduce that risk.
  - Ocean users carry a responsibility to assure the ecological sustainability of their operations and an obligation to identify and implement precautionary measures.